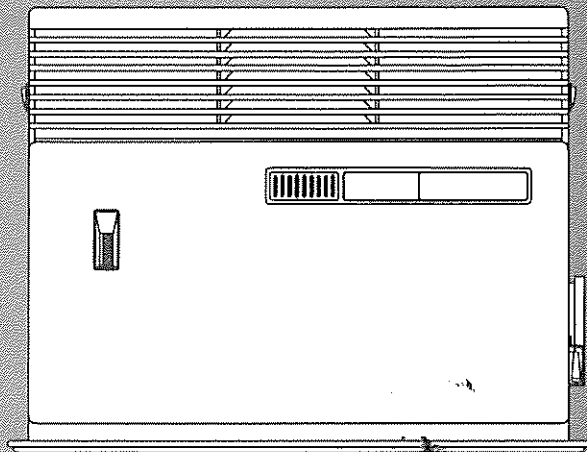


KEROSENE FAN HEATER

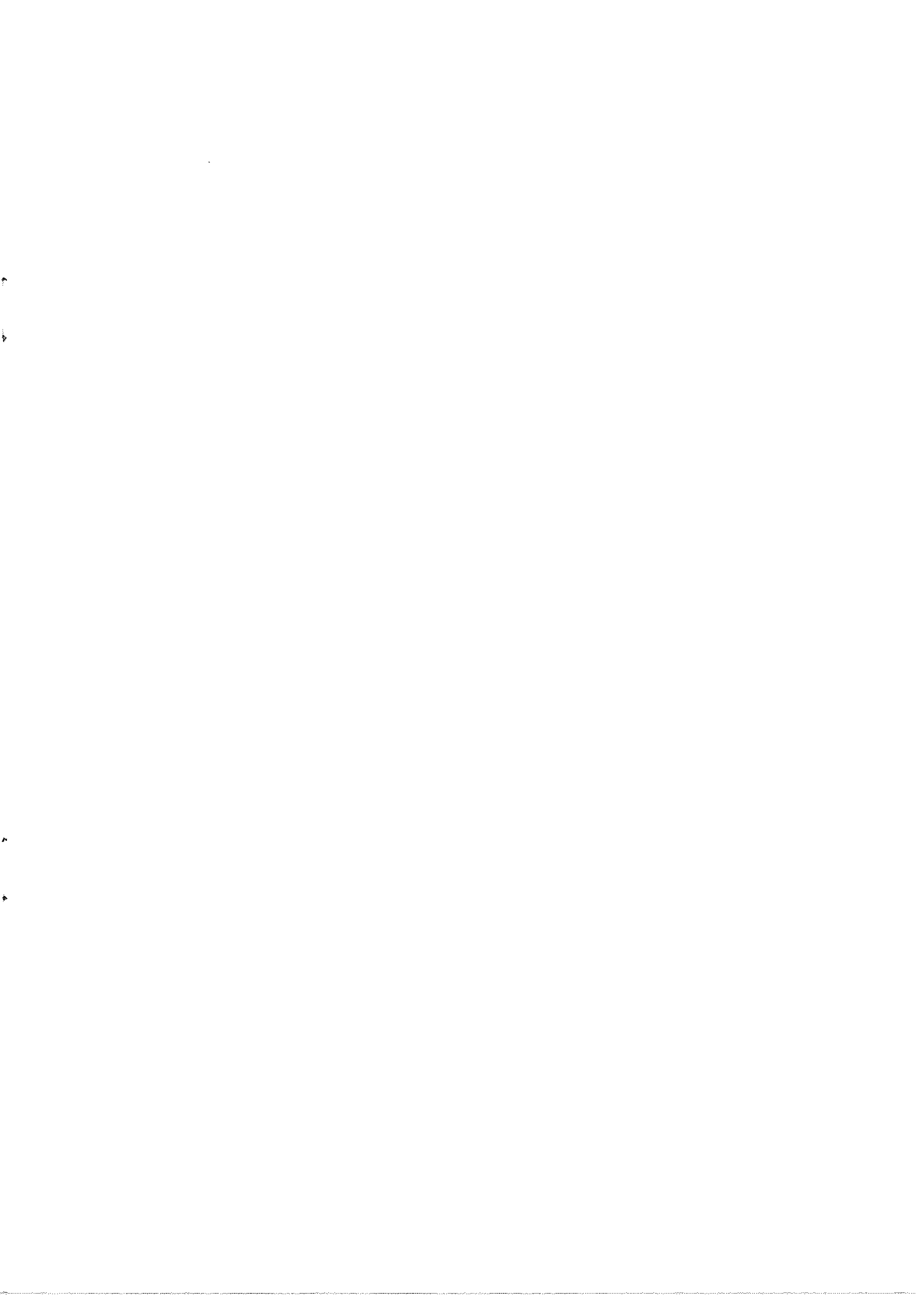
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USE AND CARE MANUAL



CONTENTS

IMPORTANT	2
COMPONENTS	3
FILLING FUEL TANK	4
STARTING HEATER	4
DELAY START	5
TURNING OFF	5
PANEL INDICATORS	6
MAINTENANCE	7
STORAGE	8
TROUBLESHOOTING	9



IMPORTANT

READ ALL INSTRUCTIONS CAREFULLY BEFORE OPERATING THE HEATER.

1. USE PURE CLEAR LIGHTING GRADE KEROSENE ONLY.

Poor quality fuel will cause smoke, odour, tar accumulation or louver discolouration. Do not use deteriorated or impure kerosene such as;

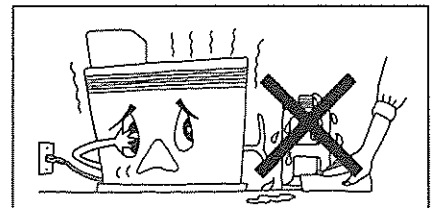
- a. Stored in white plastic container for several months,
- b. Exposed to direct sunlight or high temperatures,
- c. Mixed with water, dirt, any other oils or additives.

Such kerosene usually has yellow colour. Keep kerosene in a clean metal container and in a cool dry place.

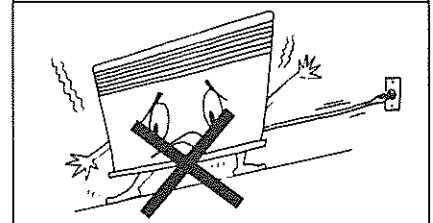
Avoid the use of any containers previously used to store oil.

2. NEVER USE GASOLINE, HEATING OIL or any fuel other than kerosene as this can cause explosion, fire and damage the heater.

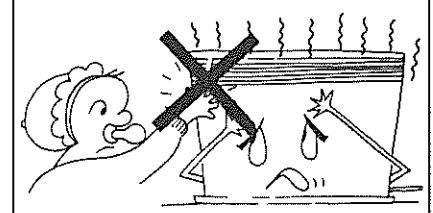
3. FIRE HAZARD. Never use heater in areas where flammable vapours or gases may be present. Tighten cap securely after filling tank. Do not remove tank when heater is operating. Do not use tank for transporting or storing kerosene or any other flammable liquids.



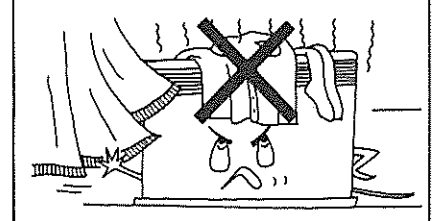
4. FOR CORRECT COMBUSTION, keep heater level. Level pendulum should be centred in red circle. Do not use outdoors, in greenhouses, bathrooms or bedrooms.



5. LOUVER AREA IS HOT IN OPERATION. Do not touch. Keep children, clothing and furniture away. Keep heater 15 cms from side walls, 10 cms from back wall. Leave at least one metre space above heater. Do not install heater in alcove.



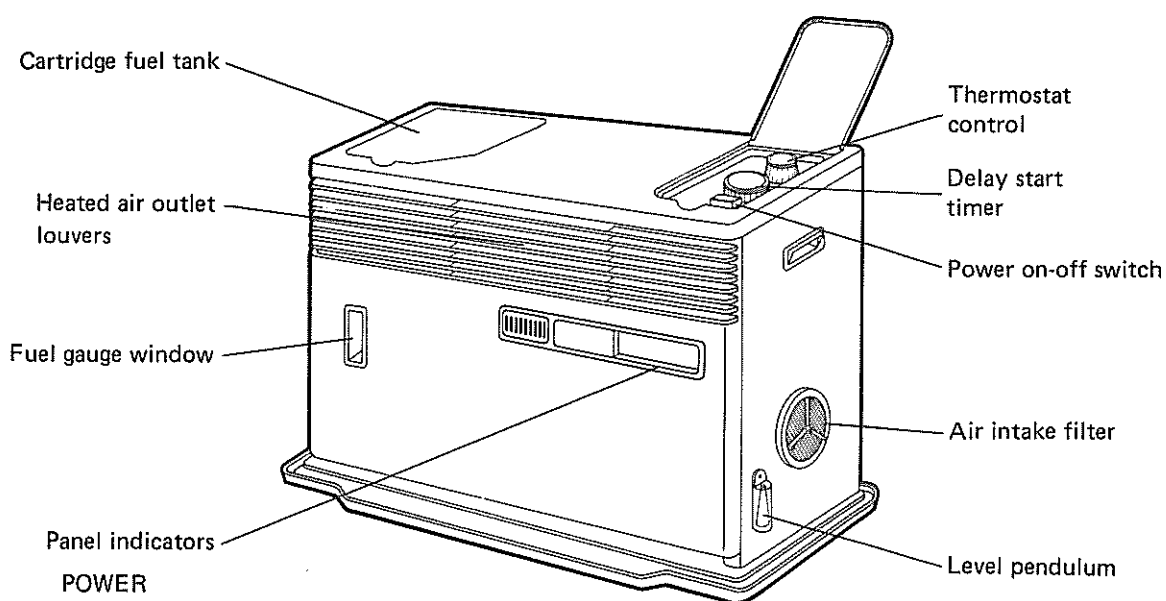
6. HAZARD OF OXYGEN DEPLETION. Use this heater only in a well-ventilated area. Ventilate closed area once or twice every hour with outside air, or keep window open slightly at all times. Do not wait for VENT indicator warning.



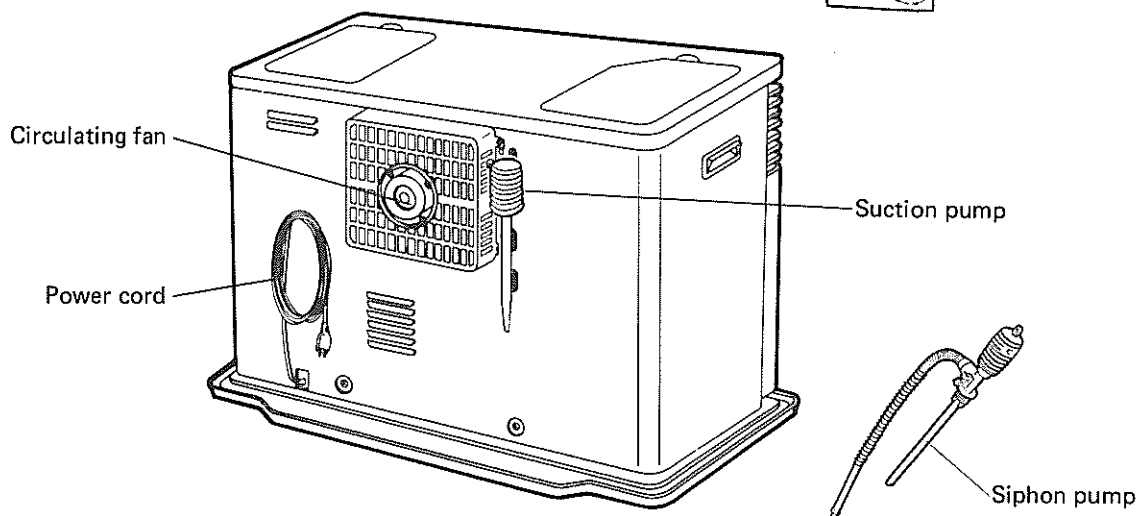
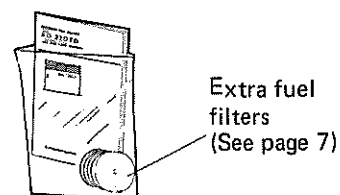
7. DISCONNECT POWER PLUG when heater is not to be used for two days or more.

SAVE THESE INSTRUCTIONS.

COMPONENTS



POWER
TIMER
VENT
TEMP
WATER
FUEL
(See page 6)



SPECIFICATIONS

Cartridge tank capacity	4.6 litres
Kerosene consumption	0.38 litres/h
Maximum heating capacity	3,200 kcal/h
Electric power consumption	70 watts
Initial preheat power (maximum)	470 watts

FILLING FUEL TANK

USE PURE CLEAR LIGHTING GRADE KEROSENE ONLY.

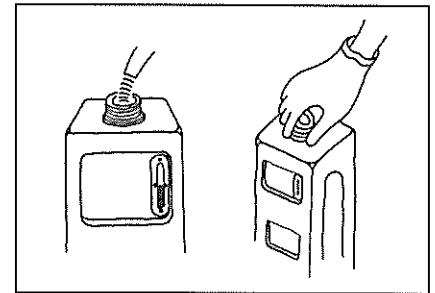
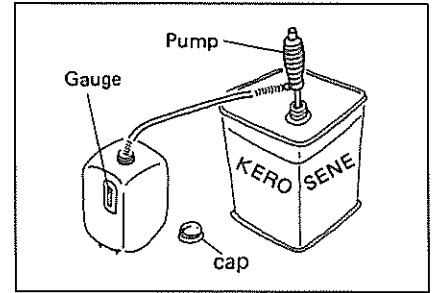
NEVER USE GASOLINE, HEATING OIL or any fuel other than kerosene.

1. Remove fuel tank from heater, turn upside down, set siphon pump as shown.

Tighten plastic cap on top of pump, and squeeze bulb several times.

2. Observe fuel gauge. Fuel appears as black in yellow fuel gauge. When fuel level reaches the centre of the gauge, release plastic cap to stop fuel flow.

3. Tighten tank cap, and place tank into heater, with cap side down and fuel gauge to front.



STARTING HEATER

1. Set THERMOSTAT for desired room temperature.

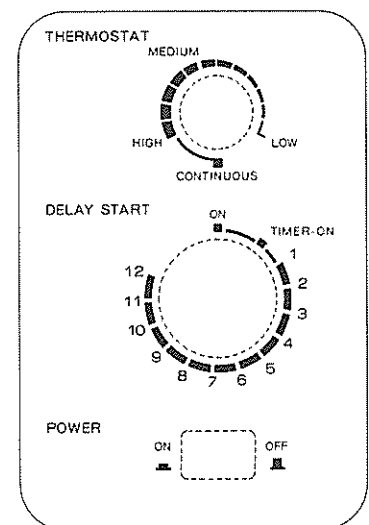
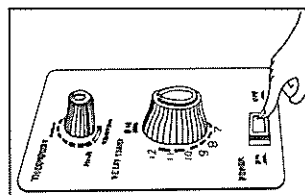
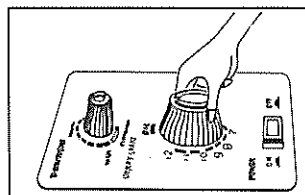
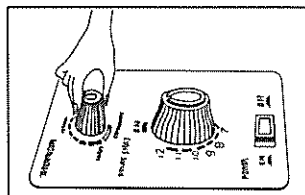
Approx. Temperature Guide

LOW	7°C
MEDIUM	18°C
HIGH	28°C
CONTINUOUS	...	Continuous high heat

2. Set DELAY START to "ON" mark on top. See next page for delay start.

3. Press POWER button.

Check to see that POWER indicator is flashing slowly.



After approximately 4 minutes of preheating, POWER indicator turns on continuously. Then the heater ignites automatically. For about 15 seconds, the ignition noise will be heard and the heater should start.

If the heater misfires, another 15-second ignition cycle will be repeated automatically. If unsuccessful again, the heater shuts off, and POWER indicator flashes rapidly. See page 6 for panel indicators.

NOTE:

Slight kerosene odour and white mist at ignition or shut-off are normal. For the first 2 or 3 hours of operation, an unusual odour and smoke may be noticed. This is caused by heat curing of high temperature paints used on heater.

DELAY START

1. Rotate DELAY START timer clockwise, setting it at the desired number of hours before starting the heater.

If setting is less than 2 hours, the knob should be rotated past "2", and then set to the desired time.

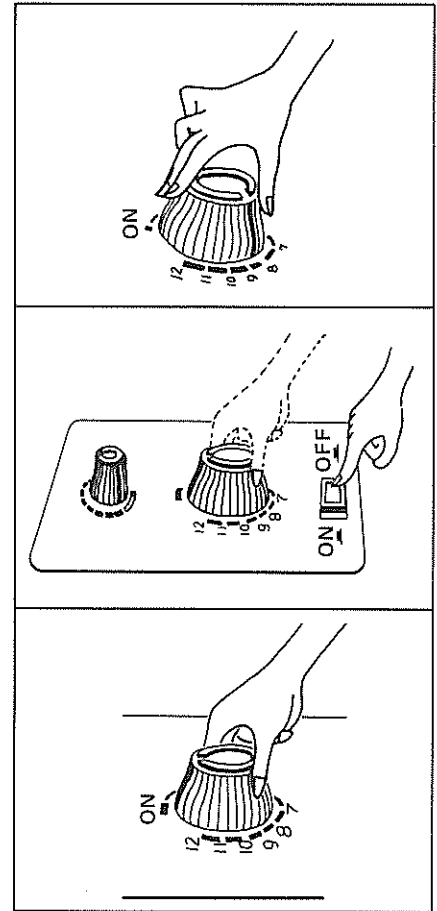
2. Press POWER button to ON.

Check to see that TIMER indicator is glowing continuously.

Both DELAY START and POWER must be used for this feature.

After DELAY START dial is returned to "TIMER-ON", TIMER indicator and POWER indicator flash slowly — heater is preheating. Then POWER indicator turns on continuously, and ignition will take place automatically.

However, TIMER indicator will continue flashing until DELAY START dial is turned to "ON" manually. Otherwise, heater shuts off automatically at one hour after being started by TIMER.

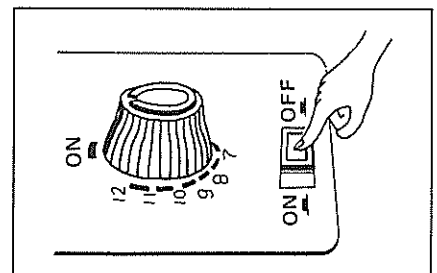


TURNING OFF


1. Press POWER button.


Check to see that POWER indicator is off.


2. Disconnect power plug when heater is not to be used for a long period of time.



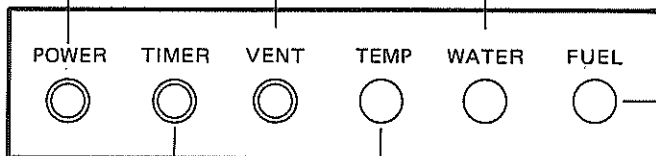
PANEL INDICATORS

 Slow flash shows preheating. Allow about four minutes to heat up carburetor.


 Steady-on shows ready for ignition, then continuous running.


 Rapid flash shows automatic shut down. Follow other indicators. If only POWER light flashes, reset POWER switch button.


POWER



TIMER

 Steady-on, DELAY START timer has been activated.

 Slow flash. Heater has been started by TIMER-ON, but needs manual turning to ON for more than one hour use.

 Rapid flash. Tipover switch or power failure has shut down the heater.

 **VENT**

Heater has been shut down by oxygen depletion or dirty air filter. Ventilate room, or clean filter, then reset POWER switch. See AIR FILTER maintenance on page 7.

 **WATER**

Heater has been shut down by water in fuel line. Remove water, then reset POWER switch. See LOWER TANK maintenance on page 7.

 **FUEL**

Heater has been shut down by low fuel level. Refill tank, then reset POWER switch.

 **TEMP**

Room temperature has reached 5°C higher than THERMOSTAT setting even at the lowest flame. Thermostat does not shut the heater off, however, it keeps the lowest flame. Press POWER switch off to conserve fuel, or turn THERMOSTAT to higher setting if desired.

MAINTENANCE

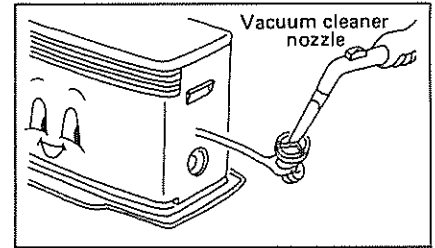
The following procedures are considered normal maintenance by the user.
Turn heater off and allow to cool before maintenance.

AIR FILTER

Clean filter on side intake once a week.

1. Remove filter from side intake.
2. Tap gently to remove dust or remove with vacuum cleaner.
3. Filter may be rinsed in cold water.
Be sure to air dry thoroughly.

CAUTION: Do not operate heater with air filter removed.

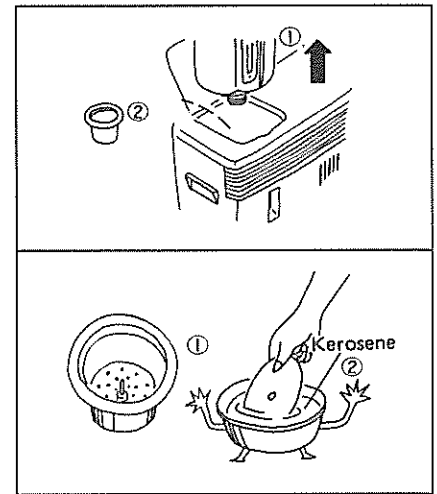


FUEL FILTER

Dirt in kerosene will be trapped in this filter. If excessive, heater may fail to start.

1. Lift out fuel tank (1), and filter container (2) from lower tank.
2. Remove filter (1) from container and wash it with clear kerosene (2).
3. If filter is too dirty, replace with a new one.
Five extra filters are supplied with this manual.

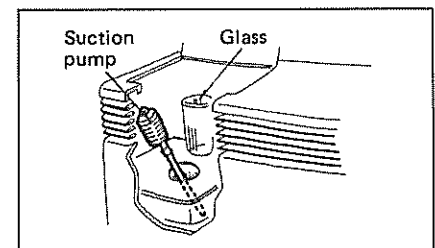
CAUTION: Do not use water or gasoline.
Do not operate heater with fuel filter removed.



LOWER TANK

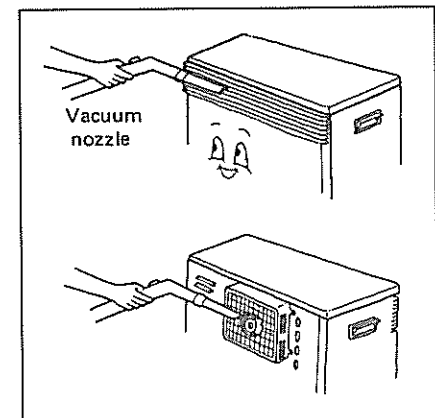
If WATER indicator comes on, clean lower tank as follows.

1. Lift out fuel tank and filter container from lower tank.
2. Place a glass or other container on sub-tank to receive sucked up fuel.
3. Remove fuel and/or water from lower tank with manual suction pump found on back of heater.



LOUVERS

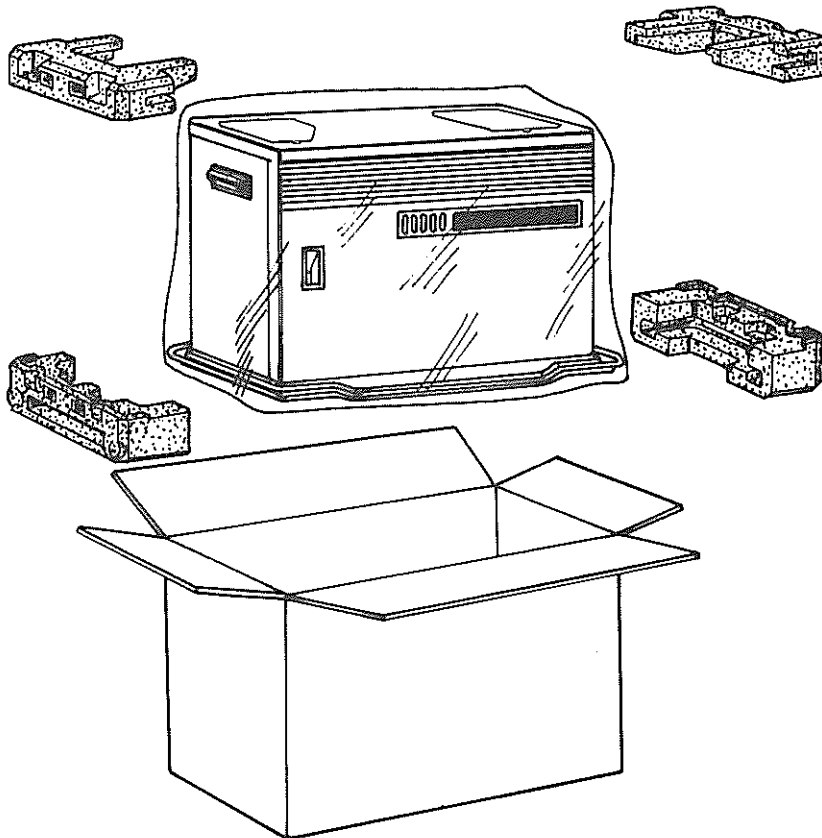
1. Allow to cool before cleaning.
2. Vacuum dust on front louvers and rear fan guard.
3. Wipe residue on front louvers with damp cloth.



STORAGE

After heating season, store heater as follows:

1. Disconnect plug from wall outlet.
2. Remove cartridge tank from heater and drain kerosene completely.
3. Drain lower tank and clean fuel filter. See MAINTENANCE on page 7.
4. Clean dust on side air intake, louvers and rear fan guard.
5. Put heater into carton and store it in a clean, dry place.
6. Do not store heater in an inverted position or on its sides.
Keep heater level to keep the remaining kerosene from leaking out of fuel line.
7. Save instructions for future reference.



TROUBLESHOOTING

If your heater should stop working or require other service, do not attempt repairs or make adjustments yourself. For qualified service, contact your Dealer or Distributor shown on the back cover of this manual.

Before calling for service, please check Panel Indicators condition on page 6, and the following Troubleshooting Guide (1) and (2).

TROUBLESHOOTING GUIDE (1)

The following conditions are normal.

SYMPTOM	POSSIBLE CAUSE AND/OR REMEDY
Slight smoke or odor at first use.	Heat curing of paints or burning of dust on heater.
Bump noise at ignition or turning off.	Heat expansion or shrinkage in heater construction.
Yellow flame at start.	Helps ensure ignition, then will turn to correct flame in 15 or 20 seconds.
White smoke at ignition.	Kerosene mist may appear until it is ignited.
Ignition plug, flame sensing electrode and burner head turn red.	This is a normal condition, heated by flame.
Flame is red or other unusual colour.	A humidifier used in the same room may change flame colour depending on minerals in water.
White dust on outlet louvers.	Wipe clean with damp cloth.

944510-1
TROUBLESHOOTING GUIDE (2)

SYMPTOM POSSIBLE CAUSE AND REMEDY	POWER indicator does not light.	POWER indicator flashes rapidly.	TIMER indicator flashes rapidly.	Flame does not appear.	Only white smoke appears.	Kerosene odour.	Very small flame.	Flame always turns to low.	Yellow flame or soot.	Flame goes out.	Fuel leakage.
Power plug is not connected. Connect plug.	X			X							
Tipover switch is off. Check level and reset power.		X	X	X						X	
Power failure. Reset POWER after recovery.	X	X	X	X						X	
Tank is empty. Refill tank.		X	X	X						X	
Fuel filter is clogged. Clean or replace filter.		X	X	X	X					X	
Air filter is clogged. Clean air filter.		X		X	X	X	X			X	
Heater is tilted (Left is high). Correct level.									X		
Heater is tilted (Right is high). Correct level.				X	X	X	X			X	
DELAY START is activated. Turn timer dial to ON.	X			X							
Power off during DELAY START. Reset POWER switch.		X	X	X						X	
Outlet louver is blocked. Remove obstacles.										X	
Circulating fan is blocked. Remove obstacles.								X		X	
THERMOSTAT is too low. Turn to higher setting.								X			
DELAY START is at TIMER-ON. Turn timer dial to ON.				X						X	
Ventilation alarm system. Ventilate room.		X								X	
Water in fuel. Follow water removal procedure.		X		X	X		X			X	
Tank cap is loose. Tighten tank cap.											X
Poor quality of kerosene. Use pure clear kerosene only.					X	X					

For service, contact your nearest authorized AWA-THORN retailer or AWA-THORN Service Department listed below.

ADELAIDE:

101 Main North Road,
Nailsworth, S.A. 5083

Ph. 269 1966

BRISBANE:

73 Jane Street,
West End, QLD. 4101

Ph. 44 7211

MELBOURNE:

123 Bamfield Road,
West Heidelberg, VIC. 3081

Ph. 459 1688

HOBART:

10 Chesterman Street,
Moonah, TAS. 7009

Ph. 72 4366

PERTH:

11 Belmont Ave.,
Belmont, W.A. 6104

Ph. 277 7788

TOWNSVILLE:

Unit 2, Somer & Carse Streets,
Hyde Park, Townsville, QLD. 4810

Ph. 72 2255
72 2368

SYDNEY:

348 Victoria Road,
Rydalme N.S.W. 2116

Ph. 638 9022

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